

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	78	(514/858).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/10/26 11:02
L4	1042	((514/858) or (514/859) or (514/860) or (514/861) or (514/862) or (514/862) or (514/864) or (514/865)).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/10/26 11:03
L5	20735	frass or excrement or dung	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/26 11:03
L6	6	l4 and L5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/26 11:03
S1	0	"P." adj temminckii adj frass	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/30 10:59
S2	3	temminckii adj frass	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/30 11:00
S3	0	perpericenus adj temminckii adj frass	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/30 11:01

## EAST Search History

S4	3	purpuricenus adj temminckii adj frass	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/30 12:49
S5	4	purpuricenus and temminckii	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/26 10:57
S9	3294	424/49.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/07/30 12:56
S11	96	("20050037028" "4296036" "4560551" "4041709" "4605560" "5919366" "5992310" "6410069" "20040228947" "4170631" "4382135" "4511726" "5178094" "5351643" "5513627" "5683708" "6162593" "6278055" "6297495" "6352777" "6362257" "6413508" "6442890" "6476212" "6626169" "6682877" "6773727" "6827007" "7013899" "7033777" "20020155204" "20020170556" "20030118946" "20030180826" "20040152019" "20060032505" "4904594" "5047337" "5710016" "6458538" "20070218521" "5213798" "5286488" "6268353" "4435563" "4560568" "5507345" "4312762" "4503218" "5656278"). pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/17 12:53
S12	4	((SEISHIRO) near2 (MOCHIZUKI)). INV.	EPO; JPO; DERWENT	OR	ON	2007/10/23 08:26
S13	5	((SEISHIRO) near2 (MOCHIZUKI)). INV.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/23 08:26
S14	4	((HIROTAKA) near2 (KISHIDA)). INV.	EPO; JPO; DERWENT	OR	ON	2007/10/23 08:26

## EAST Search History

S15	20735	frass or excrement or dung	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/25 07:27
S16	771	S15 and insect	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/25 07:27
S17	97	S16 and medicine	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/25 07:27
S18	32	S17 and @pd<"20030115"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/25 07:28
S19	2	"4671957".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/10/26 07:08

## INVENTOR SEARCH

=&gt; d ibib abs ind 16 1-1

L6 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:570829 HCAPLUS Full-text  
 DOCUMENT NUMBER: 139:106505  
 TITLE: Skin preparation for external use containing  
 Purpuricenus temminckii frass as the active ingredient  
 INVENTOR(S): Akihisa, Toshihiro; Ishikawa,  
 Toshinori; Suzuki, Yoshihiro;  
 Mochizuki, Seishiro; Kishida, Hirotaka  
 PATENT ASSIGNEE(S): Nihon University School Juridical Person, Japan  
 SOURCE: PCT Int. Appl., 34 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003059366	A1	20030724	WO 2003-JP287	20030115
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2003277276	A	20031002	JP 2002-381414	20021227
JP 2003313196	A	20031106	JP 2003-158524	20021227
AU 2003201892	A1	20030730	AU 2003-201892	20030115
CN 1620303	A	20050525	CN 2003-802406	20030115
US 2005037028	A1	20050217	US 2004-501504	20040715
PRIORITY APPLN. INFO.:			JP 2002-8022	A 20020116
			JP 2002-381414	A 20021227
			WO 2003-JP287	W 20030115

AB It is intended to provide an antiallergic agent, a skin preparation for external use, a dermatitis preventive, an agent for relieving hay fever and a bathing preparation which originates in a natural substance and is efficacious as antipruritic against various skin itches and usable in preventing and treating atopic dermatitis and allergic symptoms. Namely, an antiallergic agent, a skin preparation for external use, a dermatitis preventive, an agent for relieving hay fever and a bathing preparation characterized by containing as the active ingredient Purpuricenus temminckii frass. For example, a lotion for the treatment of itching contained Purpuricenus temminckii frass aqueous exts. 0.2, ethanol 15, hydroxyethyl cellulose 0.1, methylparaben 0.1, and water 84.6 %.

IC ICM A61K035-64  
 ICS A61K007-50; A61P029-00; A61P037-08; A61K009-08; A61K031-575;  
 C07J009-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 62

ST antiallergy skin prep Purpuricenus temminckii frass; itching dermatitis treatment beetle frass ext

IT Dermatitis  
 (atopic, treatment of; skin preps. containing *Purpuricenus temminckii* frass exts.)

IT *Purpuricenus temminckii*  
 (frass, exts.; skin preps. containing *Purpuricenus temminckii* frass exts.)

IT Feces  
 (frass, of red bamboo longicorn beetle; skin preps. containing *Purpuricenus temminckii* frass exts.)

IT Drug delivery systems  
 (gels, topical; skin preps. containing *Purpuricenus temminckii* frass exts.)

IT Drug delivery systems  
 (lotions; skin preps. containing *Purpuricenus temminckii* frass exts.)

IT Drug delivery systems  
 (ointments, creams; skin preps. containing *Purpuricenus temminckii* frass exts.)

IT Drug delivery systems  
 (powders; skin preps. containing *Purpuricenus temminckii* frass exts.)

IT Allergy inhibitors  
 Bath preparations  
 Leukotriene antagonists  
 (skin preps. containing *Purpuricenus temminckii* frass exts.)

IT Drug delivery systems  
 (topical; skin preps. containing *Purpuricenus temminckii* frass exts.)

IT Hay fever  
 Pruritus  
 (treatment of; skin preps. containing *Purpuricenus temminckii* frass exts.)

IT 51-45-6, Histamine, biological studies 9012-33-3,  $\beta$ -Hexosaminidase  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (release inhibition by; skin preps. containing *Purpuricenus temminckii* frass exts.)

IT 1058-61-3P, Stigmast-4-en-3-one 20817-72-5P 23670-94-2P,  
 Stigmast-4-en-3,6-dione  
 RL: PUR (Purification or recovery); PREP (Preparation)  
 (skin preps. containing *Purpuricenus temminckii* frass exts.)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

## RESULTS FROM CAPLUS

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=> d que stat 122
L9          31 SEA FILE=HCAPLUS ABB=ON ?TEMMINCKII?
L10         1 SEA FILE=HCAPLUS ABB=ON L9 AND ?FRASS?
L11         31 SEA FILE=HCAPLUS ABB=ON L9 OR L10
L12         4 SEA FILE=HCAPLUS ABB=ON L11 AND (?FOOD? OR ?BEVERAGE? OR
                  ?CREAM? OR ?LOTION? OR ?SOAP? OR OIL? OR DYE? OR ?HUMECTANT?
                  OR ?SURFACTANT? OR ?AQUEOUS? OR ?SKIN?(W)?CREAM? OR ?BATH? OR
                  ?POLLINOSIS?(4A)?ALLEV? OR ?CONTROL? OR ?ARREST? OR ?LESSEN?) OR
                  ?ANTIALLERG?)
L13         1 SEA FILE=HCAPLUS ABB=ON L12 AND ?FRASS?
L19         1 SEA FILE=REGISTRY ABB=ON WATER/CN
L20         1 SEA FILE=HCAPLUS ABB=ON (L12 OR L13) AND (L19 OR ?WATER? OR
                  ?AQUEOUS? OR H2O)
L21         4 SEA FILE=HCAPLUS ABB=ON L12 OR L13 OR L20
L22         4 SEA FILE=HCAPLUS ABB=ON L21 AND (PRD<20030115 OR PD<20030115)
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=> d ibib abs 122 1-4
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L22 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2006:1242485 HCAPLUS Full-text  
 DOCUMENT NUMBER: 146:21212  
 TITLE: Universal primers for wildlife identification and forensic identification  
 INVENTOR(S): Verma, Sunil Kumar; Singh, Lalji  
 PATENT ASSIGNEE(S): Council of Scientific and Industrial Research, India  
 SOURCE: U.S., 393pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 7141364	B1	20061128	US 2001-821782	20010329 <--
PRIORITY APPLN. INFO.:			US 2001-821782	20010329 <--

AB The invention provides novel universal primers that can amplify the fragment of cytochrome b gene of any animal species in polymerase chain reaction (PCR) and reveal the identity of the specific animal from a biol. material of any unknown animal origin. The universal forward 5'-taccatgaggacaaatcattctg-3' and reverse 5'-cctcctagttgttagggattgtcg-3' primers are complementary to a highly conserved region, but amplify a 472-bp fragment of the mitochondrial cytochrome b gene that possesses a unique sequence among 221 distantly related animal species. This PCR system can identify confiscated animal remains of unknown origin from suspectd poachers and of endangered species, to establish crimes (e.g., blood or blood stains for forensic anal.), and to identify adulteration of animal meat in food products.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:570829 HCAPLUS Full-text  
 DOCUMENT NUMBER: 139:106505  
 TITLE: Skin preparation for external use containing Purpuricenus temminckii frass as

INVENTOR(S) : the active ingredient  
 Akihisa, Toshihiro; Ishikawa, Toshinori; Suzuki, Yoshihiro; Mochizuki, Seishiro; Kishida, Hirotaka  
 PATENT ASSIGNEE(S) : Nihon University School Juridical Person, Japan  
 SOURCE : PCT Int. Appl., 34 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE : Patent  
 LANGUAGE : Japanese  
 FAMILY ACC. NUM. COUNT : 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003059366	A1	20030724	WO 2003-JP287	20030115 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2003277276	A	20031002	JP 2002-381414	20021227 <--
JP 2003313196	A	20031106	JP 2003-158524	20021227 <--
AU 2003201892	A1	20030730	AU 2003-201892	20030115 <--
CN 1620303	A	20050525	CN 2003-802406	20030115 <--
US 2005037028	A1	20050217	US 2004-501504	20040715 <--
PRIORITY APPLN. INFO.:			JP 2002-8022	A 20020116 <--
			JP 2002-381414	A 20021227 <--
			WO 2003-JP287	W 20030115

AB It is intended to provide an **antiallergic** agent, a skin preparation for external use, a dermatitis preventive, an agent for relieving hay fever and a bathing preparation which originates in a natural substance and is efficacious as antipruritic against various skin itches and usable in preventing and treating atopic dermatitis and allergic symptoms. Namely, an **antiallergic** agent, a skin preparation for external use, a dermatitis preventive, an agent for relieving hay fever and a bathing preparation characterized by containing as the active ingredient **Purpuricenus temminckii frass**. For example, a lotion for the treatment of itching contained **Purpuricenus temminckii frass aqueous exts. 0.2, ethanol 15, hydroxyethyl cellulose 0.1, methylparaben 0.1, and water 84.6 %**.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:19739 HCAPLUS Full-text  
 DOCUMENT NUMBER: 139:225024  
 TITLE: Use of restriction fragment length polymorphisms to identify sea turtle eggs and cooked meats to species  
 AUTHOR(S) : Moore, M. Katherine; Bemiss, John A.; Rice, Susan M.; Quattro, Joseph M.; Woodley, Cheryl M.  
 CORPORATE SOURCE: National Oceanic and Atmospheric Administration, Center for Coastal Environmental Health and Biomolecular Research at Charleston, Charleston, SC, 29412-9110, USA  
 SOURCE: Conservation Genetics (2003), 4(1), 95-103  
 CODEN: CGOEAC; ISSN: 1566-0621  
 PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB One of the many threats to sea turtle populations is the take of turtles and their eggs for consumption and sale. Improved species identification methods for sea turtle eggs and cooked meats would facilitate prosecution of those involved. Fatty acid-based methods to identify eggs cannot resolve loggerheads and the two ridley species. Protein-based methods are not applicable to eggs or cooked meat. We present methods to extract DNA from turtle egg and cooked meat and to produce diagnostic restriction fragment length polymorphism patterns in the cytochrome b region of the mitochondrial DNA. This method works on DNA from any tissue, and provides wildlife law enforcement another tool to combat illegal take of endangered species.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 4 OF 4 HCPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2000:644665 HCPLUS Full-text  
 DOCUMENT NUMBER: 134:85277  
 TITLE: Study on food nutrients of Temminck's Tragopan  
 AUTHOR(S): Shi, Haitao; Zheng, Guangmei  
 CORPORATE SOURCE: College Life Science, Beijing Normal Univ., Beijing, 100875, Peop. Rep. China  
 SOURCE: Beijing Shifan Daxue Xuebao, Ziran Kexueban (2000), 36(3), 379-384  
 CODEN: BSDKDH; ISSN: 0476-0301  
 PUBLISHER: Beijing Shifan Daxue Xuebao Ziran Kexueban Bianjibu  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese

AB Seventeen food items which Temminck's Tragopan prefer to consuming in natural habitat are selected as exptl. samples and 13 items collected at the same habitat which distribute widely but Temminck's Tragopan do not eat or less eat are selected as control samples. Eighteen chemical elements (P, Ca, K, Zn, etc.) are measured by ICAP-9000 for both exptl. and control samples. The content of protein in the samples are measured. There was no significant difference in element contents and protein contents between the exptl. and control samples. There was also no significant difference in preferred food items between winter and spring, but the nutrient quality of these 2 seasons is higher than that of autumn. It shows that the quality of food items can not be judged on the basis of the contents of several elements in the food, as the diets of birds may relate to seasons, individuals, phys. conditions, availability, taste, digestion, trace elements and heredity.

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=> d que stat 118
L9          31 SEA FILE=HCAPLUS ABB=ON ?TEMMINCKII?
L10         1 SEA FILE=HCAPLUS ABB=ON L9 AND ?FRASS?
L11         31 SEA FILE=HCAPLUS ABB=ON L9 OR L10
L12         4 SEA FILE=HCAPLUS ABB=ON L11 AND (?FOOD? OR ?BEVERAGE? OR
                  ?CREAM? OR ?LOTION? OR ?SOAP? OR OIL? OR DYE? OR ?HUMECTANT?
                  OR ?SURFACTANT? OR ?AQUEOUS? OR ?SKIN?(W)?CREAM? OR ?BATH? OR
                  ?POLLINOSIS?(4A)?(ALLEV? OR ?CONTROL? OR ?ARREST? OR ?LESSEN?)?
                  OR ?ANTIALLERG?)?
L15         36 SEA L12
L16         27 DUP REMOV L15 (9 DUPLICATES REMOVED)
L17         1 SEA L16 AND ?FRASS?
L18         27 SEA L16 OR L17
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=> d ibib abs 118 1-27

L18 ANSWER 1 OF 27 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN  
 ACCESSION NUMBER: 2007:348385 BIOSIS Full-text

DOCUMENT NUMBER: PREV200700352916

TITLE: Are tortoises and freshwater turtles still traded illegally  
 as pets in Singapore?.

AUTHOR(S): Goh, Ter Yang [Reprint Author]; O'Riordan, Ruth M.

CORPORATE SOURCE: Natl Univ Singapore, Dept Biol Sci, 14 Sci Dr 4, Singapore  
 117543, Singapore  
 gohteryang@yahoo.com

SOURCE: Oryx, (JAN 2007) Vol. 41, No. 1, pp. 97-100.  
 ISSN: 0030-6053.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 13 Jun 2007

Last Updated on STN: 13 Jun 2007

AB The red-eared slider *Trachemys scripta elegans* is currently the only reptile species that can be legally sold as a pet in Singapore. We report on the species of tortoises and freshwater turtles that were found for sale during a survey of 27 pet shops in 2004. Although the red-eared slider was the most common species for sale, small numbers of 11 other species were available. Of these, the import of one species (the Chinese soft-shell turtle *Pelodiscus sinensis*) is allowed for food but import of the other 10 species is not permitted for either food or the pet trade. We found that illegally held chelonians are often not kept on the pet shop premises. Our findings suggest that the Singaporean authorities' efforts to address illegal wildlife trade have to include other methods in addition to conducting raids on shop premises.

L18 ANSWER 2 OF 27 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN  
 ACCESSION NUMBER: 2006:640170 BIOSIS Full-text

DOCUMENT NUMBER: PREV200600646490

TITLE: Food habits of *Macrochelys temminckii*

(Alligator snapping turtle) from Arkansas and Louisiana.

AUTHOR(S): Elsey, Ruth M. [Reprint Author]

CORPORATE SOURCE: Rockefeller Wildlife Refuge, Louisiana Dept Wildlife and  
 Fisheries, 5476 Grand Chenier Highway, Grand Chenier, LA  
 70643 USA

reelsey@wlf.louisiana.gov

SOURCE: Southeastern Naturalist, (2006) Vol. 5, No. 3, pp. 443-452.

ISSN: 1528-7092.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 22 Nov 2006

Last Updated on STN: 22 Nov 2006

AB Food habits of 109 *Macrochelys temminckii* (Alligator Snapping Turtles) collected from Arkansas and Louisiana were studied by examination of stomach and intestinal tract contents from harvested turtles. There was a positive correlation between the turtle carcass mass and the gastrointestinal tract content mass ( $r = 0.39106$ ,  $p < 0.0001$ ). The most commonly occurring prey item was fish, followed by *Procambarus clarkii* (crawfish), molluscs, turtles, insects, and *Myocastor coypus* (nutria). Other mammalian species occurred infrequently, as did snakes, birds, and crabs. Several species (*Dasyurus novemcinctus* [armadillo], *Didelphis virginiana* [opossum], *Sciurus* sp. [squirrel], and *Sus scrofa* [hogs]) that have not previously been reported as prey items for Alligator Snapping Turtles were noted. Some prey items were recovered in intestinal tracts that were not observed in stomachs, illustrating the importance of examination of the entire gastrointestinal tract when evaluating food habits in this species. The results suggest Alligator Snapping Turtles are opportunistic scavengers able to consume a wide variety of prey species.

L18 ANSWER 3 OF 27 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2006:449358 BIOSIS Full-text

DOCUMENT NUMBER: PREV200600446355

TITLE: Patterns of food transfer in Temminck's red colobus.

AUTHOR(S): Starin, E. D. [Reprint Author]

CORPORATE SOURCE: Univ Coll London, Dept Anthropol, Gower St, London WC1E 6BT, UK

e.starin@ucl.ac.uk

SOURCE: Aggressive Behavior, (MAY-JUN 2006) Vol. 32, No. 3, pp. 181-186.

CODEN: AGBEDU. ISSN: 0096-140X.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 13 Sep 2006

Last Updated on STN: 13 Sep 2006

AB This paper presents data on the behaviours and food types associated with the transfer of individual food items in Temminck's red colobus (*Procolobus badius temminckii*). The relevance of (a) male-female differences and (b) the properties of the individual food items are addressed. Although the data are limited, it does suggest that food transfer, in this species, is infrequent, not particularly related to increasing nutritional knowledge or value, usually involve highly visible large items and is predominantly an aggressive male behaviour-from infancy through adulthood.

L18 ANSWER 4 OF 27 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2006:90963 BIOSIS Full-text

DOCUMENT NUMBER: PREV200600087444

TITLE: Developmental morphology of the Indian cyprinid fish *Barilius canarensis*.

AUTHOR(S): Sado, Tetsuya [Reprint Author]; Kimura, Seishi

CORPORATE SOURCE: Nat Hist Museum and Inst, Dev Zool, Chuo Ku, 955-2 Aoba Cho, Chiba 2608682, Japan

zacco\_evolans@yahoo.co.jp; kimura-s@bio.mie-u.ac.jp

SOURCE: Ichthyological Research, (NOV 2005) Vol. 52, No. 4, pp. 360-363.

ISSN: 1341-8998.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 25 Jan 2006

Last Updated on STN: 25 Jan 2006

AB Embryonic and larval development of an Indian cyprinid fish, *Barilius canarensis*, is described from laboratory-reared specimens. The eggs, measuring 2.1-2.4 mm in diameter, were demersal, almost spherical in shape, transparent and unpigmented, with a pale yellow yolk without oil globules. Hatching occurred 39-45 h after fertilization at 26.8 degrees C 27.4 degrees C. The newly hatched larvae, measuring 4.8-5.1 mm in body length (BL) with 22 + 17 = 39 myomeres, were characterized by melanophores already deposited on the eyes. The eggs of *B. canarensis* resembled those of the related danionin species *Candidia barbatus*, *Opsariichthys uncirostris uncirostris*, *Zacco platypus*, *Z. sieboldii*, and *Z. temminckii*. Although the larvae of *B. canarensis* were also similar to those of the foregoing species in general morphology, they differed in having a straight notochord tip and pigmentation on the eyes at hatching and the almost entire absence of melanophores on the ventral body surface from the yolk sac to postflexion larval stages. Conversely, melanophores occurred on the anterior abdominal and pericardial cavities from the preflection to postflexion larval stages.

L18 ANSWER 5 OF 27 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2004:130985 BIOSIS Full-text

DOCUMENT NUMBER: PREV200400131806

TITLE: Contributions to the knowledge of anatomic and adaptive characteristics of the esophagus and the stomach in some birds (Aves): Morphological adaptations.

Original Title: Contributions a la connaissance des caracteres anatomiques et adaptatifs de l'oesophage et de l'estomac chez certains oiseaux (Aves): Adaptations morphologiques..

AUTHOR(S): Papadopol, Aurel [Reprint Author]

CORPORATE SOURCE: Muzeul National de Istorie Naturala "Grigore Antipa", Sos. Kiseleff nr.1, 79744, Bucuresti, 2, Romania

SOURCE: Travaux du Museum National d'Histoire Naturelle "Grigore Antipa", (2002) Vol. 44, pp. 405-422. print.

DOCUMENT TYPE: Article

LANGUAGE: French

ENTRY DATE: Entered STN: 10 Mar 2004

Last Updated on STN: 10 Mar 2004

AB There is presented the study of esophagus and stomach in 8 bird species: *Pernis apivorus*, *Calidris temminckii*, *Tringa totanus*, *Scolopax rusticola*, *Chlidonias leucopterus*, *Sterna hirundo*, *Strix aluco* and *Apus apus*. Although all these species are carnivorous, one can see characteristic adaptations to the food.

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ACCESSION NUMBER: 2003:48992 BIOSIS Full-text

DOCUMENT NUMBER: PREV200300048992

TITLE: Developmental morphology of the cyprinid fish, *Candidia barbatus*.

AUTHOR(S): Sado, Tetsuya; Kimura, Seishi [Reprint Author]

CORPORATE SOURCE: Fisheries Research Laboratory, Mie University, Wagu, P.O. Box 11, Shima, Mie, 517-0703, Japan

oz60230@cc.mie-u.ac.jp; kimura-s@bio.mie-u.ac.jp

SOURCE: Ichthyological Research, (November 25 2002) Vol. 49, No. 4, pp. 350-354. print.

ISSN: 1341-8998.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 15 Jan 2003

Last Updated on STN: 15 Jan 2003

AB Embryonic, larval, and juvenile development of a Taiwanese cyprinid fish, *Candidia barbatus*, is described from laboratory-reared specimens. The eggs, measuring 1.8-2.1 mm in diameter, were demersal, almost spherical in shape, transparent and unpigmented, with a pale yellow yolk and no oil globule. Hatching occurred 56-69h after fertilization, the newly hatched larvae measuring 4.9-5.3 mm in body length (BL) with  $25-26+13-14=39-40$  myomeres. The yolk was completely absorbed at 7.6 mm BL. Notochord flexion was initiated at 6.8 mm BL and finished at 7.6 mm BL. Aggregate numbers of all fin rays were completed at 12 mm BL. Barbels on the upper jaw appeared near the corner of the mouth at 17 mm BL. Eggs of the species closely resembled those of its related cyprinid genera, *Opsariichthys* and *Zacco*. Larvae and juveniles of *C. barbatus* were similar to those of *O. uncirostris* subspp., *Z. platypus*, and *Z. pachycephalus*, but differed from the latter in the process of disappearance of the adipose finfold (postflexion larval stage), barbels on upper jaw (juvenile stage), and pigmentation on the lateral body surface (postflexion larval and juvenile stages). Although *C. barbatus* also differed from the *Z. temminckii* species' group (*Z. temminckii* and *Zacco* sp. (sensu Hosoya, 2002)) in having barbels, larvae and juveniles of the former showed more similarity to the latter species group than to *O. uncirostris* subspp., *Z. platypus*, and *Z. pachycephalus*, from the aspect of head and body pigmentation.

L18 ANSWER 7 OF 27 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:514117 BIOSIS Full-text

DOCUMENT NUMBER: PREV200200514117

TITLE: Descriptive morphology of the eggs, larvae, and juveniles of two cyprinid fishes belonging to the *Zacco temminckii* species' group.

AUTHOR(S): Sado, Tetsuya; Kimura, Seishi [Reprint author]

CORPORATE SOURCE: Fisheries Research Laboratory, Mie University, Wagu, P.O. Box 11, Shima, Mie, 517-0703, Japan  
oz60230@cc.mie-u.ac.jp; kimura-s@bio.mie-u.ac.jp

SOURCE: Ichthyological Research, (August 23, 2002) Vol. 49, No. 3, pp. 245-252. print.

ISSN: 1341-8998.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 2 Oct 2002

Last Updated on STN: 2 Oct 2002

AB Embryonic, larval, and juvenile development of two cyprinid species belonging to the *Zacco temminckii* species' group, *Z. temminckii* (Temminck and Schlegel) and *Zacco* sp. (type A), are described and compared with each other from laboratory-reared and wild specimens. The eggs of both species were closely similar except in diameter (1.92-2.20mm in *Z. temminckii* vs. 1.60-1.75mm in *Z. sp. (type A)*), being demersal, almost spherical in shape, transparent and unpigmented, with a pale yellow yolk, and no oil globule. Hatching occurred 40-53h after fertilization in *Z. temminckii* and after 47-60h in *Z. sp. (type A)*. The newly hatched larvae of both species (4.9-5.3mm in body length (BL) in *Z. temminckii* and 3.5-4.8mm BL in *Z. sp. (type A)*) also resembled each other, having a large transparent pear-shaped yolk and lacking body pigmentation. Myomere counts of *Z. temminckii* and *Z. sp. (type A)* larvae and juveniles were  $24-27+14-17=41-42$  and  $23-27+14-17=40-41$ , respectively. The yolk was completely absorbed at 8.3mm BL in *Z. temminckii* and at 6.6mm BL in *Z. sp. (type A)*. Notochord flexion was initiated and completed at 7.8mm BL and 8.2mm BL in *Z. temminckii* and at 6.3mm BL and 6.6mm BL in *Z. sp. (type A)*.

respectively. Aggregate numbers of all fin rays were completed at 17mm BL in *Z. temminckii* and 13 mm BL in *Z. sp.* (type A). Although the morphology of larvae and juveniles of both species was very similar, differences in body length of each developmental stage, the duration and process of disappearance of the adipose finfold, the anal fin ray counts, and pigmentation on the lateral body surface were clearly recognized.

L18 ANSWER 8 OF 27 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:447805 BIOSIS Full-text

DOCUMENT NUMBER: PREV200200447805

TITLE: Diet of three courser species in an open grassland habitat, central South Africa.

AUTHOR(S): Kok, O. B. [Reprint author]; Kok, A. C.

CORPORATE SOURCE: Department of Zoology and Entomology, University of the Free State, P.O. Box 339, Bloemfontein, 9300, South Africa  
kokob@sci.uovs.ac.za

SOURCE: South African Journal of Wildlife Research, (April, 2002) Vol. 32, No. 1, pp. 39-42. print.

ISSN: 0379-4369.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 21 Aug 2002

Last Updated on STN: 21 Aug 2002

AB Analyses of the stomach contents of 76 double-banded coursers (*Smutsornis africanus*), 28 Burchell's coursers (*Cursorius rufus*) and five Temminck's coursers (*C. temminckii*) collected at the Bloemfontein airport over a period of 13 years (1985-1997) showed the dietary composition of these closely related species to be remarkably similar. In all cases the coursers were found to be predominantly insectivorous. Isoptera, almost exclusively *Hodotermes mossambicus* workers, made up the bulk of the insect material. With regard to the double-banded courser, harvester termites were utilized throughout the year with little seasonal variation. Interspecific competition for food is probably limited by the nomadic way of life of these birds.

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ACCESSION NUMBER: 2002:213542 BIOSIS Full-text

DOCUMENT NUMBER: PREV200200213542

TITLE: Testudines: *Macrochelys temminckii* (Alligator snapping turtle).

AUTHOR(S): Lewis, Thomas E. [Reprint author]; Irwin, Kelly J.

CORPORATE SOURCE: St. Vincent National Wildlife Refuge, Apalachicola, FL, 32329, USA

[kirwin@agfc.state.ar.us](mailto:kirwin@agfc.state.ar.us)

SOURCE: Herpetological Review, (December, 2001) Vol. 32, No. 4, pp. 273, 274. print.

ISSN: 0018-084X.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 27 Mar 2002

Last Updated on STN: 27 Mar 2002

L18 ANSWER 10 OF 27 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:385078 BIOSIS Full-text

DOCUMENT NUMBER: PREV199900385078

TITLE: Study on the relation between habitat selection and diet of Temminck's Tragopan.

AUTHOR(S): Shi Hai-tao [Reprint author]; Zheng Guang-mei

CORPORATE SOURCE: Department of Biology, Hainan Teachers University, Haikou, 571158, China  
 SOURCE: Zoological Research, (1999) Vol. 20, No. 2, pp. 131-136. print.  
 CODEN: DOYADI. ISSN: 0254-5853.  
 DOCUMENT TYPE: Article  
 LANGUAGE: Chinese  
 ENTRY DATE: Entered STN: 28 Sep 1999  
 Last Updated on STN: 28 Sep 1999

AB A study on home range, habitat selection and diet of Temminck's Tragopan (*Tragopan temminckii*) with telemetry was performed from November 1993 to October 1994. The distribution of radio-locations and droppings were relatively concentrated. The distribution of its food items indicated that the habitat selection of *T. temminckii* was closely relevant to its diet. The preferred habitat situated in the part of the higher elevations and within 100 m along the path in the valley with rich bushes and herbs. In spring and winter, *T. temminckii* fed mainly on herb and ferns and its home range size was larger. In rainy and foggy weather, *T. temminckii* occurred often on the path of valley. In summer and autumn, its food was the mature fruits and its home range was smaller and more regular than that in spring and winter.

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ACCESSION NUMBER: 1999:228525 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV199900228525  
 TITLE: The study on diet of Temminck's Tragopan.  
 AUTHOR(S): Shi Hai-tao [Reprint author]; Zheng Guang-mei  
 CORPORATE SOURCE: Department of Biology, Hainan Teachers University, Haikou, 571158, China  
 SOURCE: Zoological Research, (1998) Vol. 19, No. 3, pp. 225-229. print.  
 CODEN: DOYADI. ISSN: 0254-5853.  
 DOCUMENT TYPE: Article  
 LANGUAGE: Chinese  
 ENTRY DATE: Entered STN: 17 Jun 1999  
 Last Updated on STN: 17 Jun 1999

AB From November 1993 to October 1994, the diet of Temminck's Tragopan (*Tragopan temminckii*) was studied in Xianrenshan area of Guizhou Province with field observations, trace checking, dropping analysis and crop examinations. Radiotelemetry was used for tracing three Temminck's Tragopans. The results of diet analysis were as follows: Temminck's Tragopan performed 5 types of feeding patterns, e. g. pecking, digging, jump-feeding, chase-feeding and feeding on trees with pecking as the main pattern. They moved to rugged areas in snowy weather; and preferred to feeding along the trails in valleys when it's raining or foggy. This behaviour is closely related to the food supplies. The pheasant was found to have 87 food items throughout the year. The food items of Spring, Summer, Autumn and Winter were 59, 28, 24 and 44, respectively. The diet was significantly different between seasons. In the same season, the diet varied with areas and individuals. Generally, Temminck's Tragopans fed on a variety of herbs and ferns in winter and spring. In summer and autumn, they fed on fruits of several species of bushes and trees, as well as herb seeds. The fruit of *Alangium chinense* and *Macrocarpium chinensis* were the main food in autumn. Different from Cabot's Tragopan, Temminck's Tragopan feed on a number of different kinds of food without relying on one of them. This is probably one of the important reasons that Temminck's Tragopan has larger distribution area and is more common than Cabot's Tragopan.

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ACCESSION NUMBER: 1996:81002 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV199698653137  
 TITLE: Demonstration of the second intermediate hosts of Clinostomum complanatum in Korea.  
 AUTHOR(S): Chung, Dong-Il [Reprint author]; Kong, Hyun-Hee; Moon, Chu-Hwan  
 CORPORATE SOURCE: Dep. Parasitol., Kyungpook National Univ. Sch. Med., Taegu 700-422, South Korea  
 SOURCE: Korean Journal of Parasitology, (1995) Vol. 33, No. 4, pp. 305-312.  
 CODEN: KSCHAV. ISSN: 0368-6809.  
 DOCUMENT TYPE: Article  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 27 Feb 1996  
 Last Updated on STN: 27 Feb 1996

AB A species of metacercariae recovered from the fresh-water fish, collected from Kaumji (Pond), Kaechonji (Pond) and Ssanggyecheon (River), Uisong-gun, Kyongsangbuk-do, Korea, was identified as *Clinostomum complanatum* by morphological observation and experimental infection to chicks. The excysted metacercariae, tongue-shaped and progenetic, were 3.28-4.27 mm in length and 0.94-1.46 mm in width. The adult flukes recovered from the chicks four days after infection were 4.20-4.86 mm long and 1.14-1.49 mm wide. Twelve species of the fresh-water fish were found to be infected with the metacercariae. The infection rate ranged from 1.6% (*Zacco temminckii*) to 88.9% (*Acheilognathus rhombea* and *Microphysogobio yaluensis*). The intensity was highest in *Carassius auratus* (13-0/fish infected) and the abundance (relative density) was highest in *A. rhombea* (7.8/fish examined). This survey demonstrated for the first time the source of human infection by *C. complanatum* in Korea.

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ACCESSION NUMBER: 1991:293047 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV199192014062; BA92:14062  
 TITLE: A CONTRIBUTION OF THE ECOLOGY OF THE STEPPE PANGOLIN MANIS-TEMMINCKII IN THE TRANSVAAL.  
 AUTHOR(S): JACOBSEN N H G [Reprint author]; NEWBERY R E; DE WET M J; VILJOEN P C; PIETERSEN E  
 CORPORATE SOURCE: NATURE AND ENVIRON CONSERVATION, PRIVATE BAG X209, PRETORIA 0001, AFRICA  
 SOURCE: Zeitschrift fuer Saeugetierkunde, (1991) Vol. 56, No. 2, pp. 94-100.  
 CODEN: ZSSEA7. ISSN: 0044-3468.  
 DOCUMENT TYPE: Article  
 FILE SEGMENT: BA  
 LANGUAGE: ENGLISH  
 ENTRY DATE: Entered STN: 25 Jun 1991  
 Last Updated on STN: 25 Jun 1991

AB Various aspects of the ecology of the Steppe pangolin in the Transvaal are discussed. These include distribution outside the Kruger National Park, activity times and movement. Food and feeding are discussed as well as aspect of reproduction and growth. Mortality factors and Management problems, indicate the necessity for greater in-depth studies of these enigmatic animals.

L18 ANSWER 14 OF 27 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1989:424917 BIOSIS Full-text

DOCUMENT NUMBER: PREV198988083175; BA88:83175  
 TITLE: NESTING BIOLOGY AND MATING SYSTEM IN AN ALPINE POPULATION  
 OF TEMMINCK'S STINT *CALIDRIS TEMMINCKII*.  
 AUTHOR(S): BREIEHAGEN T [Reprint author]  
 CORPORATE SOURCE: DEP ANIM ECOL, MUS ZOOL, UNIV BERGEN, N-50007 BERGEN, NORWAY  
 SOURCE: *Ibis*, (1989) Vol. 131, No. 3, pp. 389-402.  
 CODEN: IBISAL. ISSN: 0019-1019.  
 DOCUMENT TYPE: Article  
 FILE SEGMENT: BA  
 LANGUAGE: ENGLISH  
 ENTRY DATE: Entered STN: 19 Sep 1989  
 Last Updated on STN: 19 Sep 1989

AB A colour-marked population of Temminck's stint *Calidris temminckii* was studied in an alpine area of southern Norway over 3 years. Birds arrived from late May until late June, and egg-laying occurred over approximately 1 month. Each year, one to three males out of about 15-17 males still displayed after the last recorded clutch-completion date. There were six documented cases of double-clutching. Inter-clutch intervals varied (range 2.8-9.7 days, longer intervals probably being caused by weather-induced food shortage. A successively bigamous mating pattern was recorded in both sexes. A polygynously (bigamously) mated male invariably incubated its first mate's clutch. Females consistently changed mates between layings of successive clutches, the last one incubated by themselves. An excess of nesting females was found, particularly in parts of the study area where nesting started late. This appears to have been caused mainly by a considerable annual immigration of late-arriving females, having probably laid their first clutch(es) elsewhere, in nesting habitats that were available earlier. I suggest that male availability is relatively unimportant compared with other factors governing female movements between layings of successive clutches; females may increase their reproductive success, either by achieving a longer egg-laying season (i.e. by moving from nesting habitats/areas available early in the season to those available later) or by being capable of utilizing favourable feeding habitats/conditions in different areas.

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ACCESSION NUMBER: 1988:351705 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV198886047183; BA86:47183  
 TITLE: POPULATION TRENDS AMONG ARCHIPELAGO BIRDS IN THE KRUNNIT SANCTUARY NORTHERN GULF OF BOTHNIA IN 1939-85.  
 AUTHOR(S): HELLE E [Reprint author]; HELLE P; VAISANEN R A  
 CORPORATE SOURCE: FINNISH GAME FISH RES INST, GAME DIV, TURUNLINNANTIE 8, SF-00930 HELSINKI, FINL  
 SOURCE: *Ornis Fennica*, (1988) Vol. 65, No. 1, pp. 1-12.  
 CODEN: ORFEA6. ISSN: 0030-5685.  
 DOCUMENT TYPE: Article  
 FILE SEGMENT: BA  
 LANGUAGE: ENGLISH  
 ENTRY DATE: Entered STN: 3 Aug 1988  
 Last Updated on STN: 3 Aug 1988

AB Breeding pairs of ducks, alcids, waders, gulls and terns were censused on the Krunnit Islands, northern Gulf of Bothnia, in 24 summers between 1939-85. The data for ducks, gulls and terns are mainly based on nest finds, those for waders and alcids on the numbers of adult birds. The sanctuary was founded in 1936 and effective guarding started in the late 1940s. In 1939 the number of regularly nesting species was 28 and these were joined by *Scolopax rusticola*, *Tringa glareola* and *Larus argentatus* in 1940s, and by *Anas penelope*, *L. marinus* and *L. ridibundus* in the 1950s. On the other hand, *Cephus grylle* has almost disappeared. From the 1930s to the 1950s, the total bird numbers

remained at the level of about 650 pairs, but by the 1980s they had increased to over 2000 pairs, chiefly due to the rapid growth of gull and tern numbers. The populations of *Anas* species varied irregularly, except for that of *A. penelope*, which clearly increased. Most waterfowl species (8 out of 12) showed an increase from the 1970s to the 1980s. Of the waders, *Arenaria interpres* and *Actitis hypoleucus* have increased, whereas *Charadrius hiaticula*, *Calidris temminckii*, *Numenius arquata* and *Phalaropus lobatus* have decreased. In 1939 only 30 pairs of gulls were breeding on the Krunnit Islands. *Larus fuscus* showed a rapid increase in the 1950s, *L. canus* in the early 1960s, *L. argentatus* in the late 1960s and *L. ridibundus* from the early 1970s onwards. *Sterna caspia*, *S. hirundo* and *S. paradisaea* also increased. The role of this sanctuary in monitoring birds populations is discussed. Information about the feeding ecology of gulls is needed to elucidate the effect of increasing predation by *L. argentatus* and *L. marinus* in the coming years and the significance of the large *L. ridibundus* population in competition for food among gull and tern species. The bird populations of the Krunnit Islands are threatened by possible immigration of the mink, raccoon, dog and Arctic fox.

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ACCESSION NUMBER: 1988:110970 BIOSIS Full-text

DOCUMENT NUMBER: PREV198885056440; BA85:56440

TITLE: FOOD BIOLOGY OF RINGED PLOVER

CHARADRIUS-HIATICULA AND TEMMINCK'S STINT CALIDRIS-TEMMINCKII IN THE REGULATION ZONE OF A HYDROELECTRIC POWER RESERVOIR.

AUTHOR(S): MOKSNES A [Reprint author]

CORPORATE SOURCE: DEP ZOOL, UNIV TRONDHEIM, N-7055 DRAGVOLL, NORWAY

SOURCE: Fauna Norvegica Series C *Cinclus*, (1987) Vol. 10, No. 2, pp. 103-113.

ISSN: 0332-7701.

DOCUMENT TYPE: Article

FILE SEGMENT: BA

LANGUAGE: ENGLISH

ENTRY DATE: Entered STN: 23 Feb 1988

Last Updated on STN: 23 Feb 1988

AB The same stratification was found for Temminck's Stint and Ringed Plover foraging in the regulation zone of the lake Nesjo during the 1984 breeding seasons. Both species preferred to feed on the areas of peat substrate close to the water's edge. The Ringed Plover was not seen foraging beyond the regulation zone in the study area, whereas Temminck's Stint was often observed to do so. Analyses of the stomach contents of adult Temminck's Stints, shot in the regulation zone during the 1983 and 1984 breeding seasons, showed that adult chironomids were by far the most important food item (mean percentage volume, ca. 95). The diet of adult Ringed Plovers was more diverse. In addition to chironomids, ground beetles Carabidae, the weevil *Otiorrhynchus dubius* and ants Formicidae, were predominant groups found to the stomachs. The stomach contents of Ringed Plovers shot in the regulation of lake Jesjo in 1984 were compared with those of birds shot on the shores of the unregulated lake Klepptjern. A marked difference between the two localities was that while chironomids were numerous at Nesjo, they were completely absent in the stomachs of the birds from Klepptjern. This agreed well with the results obtained from data on invertebrate faunas on the shores of the two lakes. The results from pitfall traps and netsweeps made at Nesjo show that an abundance of chironomids was a characteristic feature of the regulation zone. Comparison of the results from pitfall traps and the stomach analyses showed that the Ringed Plover preferred the weevil *O. dubius* and disregarded the arachnids as a food source.

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ACCESSION NUMBER: 1982:163210 BIOSIS Full-text  
DOCUMENT NUMBER: PREV198273023194; BA73:23194  
TITLE: DEVELOPING EGGS AND EARLY LARVAE OF THE WRASSES  
CIRRHLABRUS-TEMMINCKII AND LABROIDES-DIMIDIATUS  
WITH A NOTE ON THEIR SPAWNING BEHAVIORS.  
AUTHOR(S): SUZUKI K [Reprint author]; HIOKI S; KOBAYASHI K; TANAKA Y  
CORPORATE SOURCE: FACULTY OF MARINE SCI AND TECHNOL, TOKAI UNIV  
SOURCE: Journal of the School of Marine Science and Technology  
Tokai University, (1981) No. 14, pp. 369-378.  
CODEN: TDKYBF. ISSN: 0375-3271.  
DOCUMENT TYPE: Article  
FILE SEGMENT: BA  
LANGUAGE: JAPANESE

AB The wrasses, belonging to Labridae, are well-known reef fishes and inhabit tropical, subtropical and temperate seas over the world. Both the life history and behavior of the fishes are poorly known. The characteristics in the early life stages of 2 Japanese wrasses, *C. temminckii* Bleeker and *L. dimidiatus* (Cuvier et Valenciennes) are discussed. Several adult fish of both species were collected from Uchiura Suruga Bay, central Japan. Fertilized eggs of *C. temminckii* were taken artificially between 10 females (76.0-93.0 mm TL [tail length]) and 2 males (103.6-106.0 mm TL) on 15 Aug., 1975 and those of *L. dimidiatus* were collected from an aquarium in which 4 females (about 40-55 mm TL) and a single male (about 70 mm TL) of this species were maintained and the spawnings occurred repeatedly between them. Fertilized eggs are buoyant, spherical and colorless. They measure 0.65-0.67 mm (in *C. temminckii*) and 0.70-0.73 mm (in *L. dimidiatus*) in diameter. The fertilized eggs of *C. temminckii* have only a single oil globule, those of *L. dimidiatus* have a large oil globule and several small ones which are fusing together gradually into a large one during egg development. The hatching of *C. temminckii* takes place 23 h after fertilization at water temperatures of 23.8°-26.4° C and that of *L. dimidiatus* occurs 31 h after fertilization at water temperatures of 21.6°-24.2° C. The newly hatched larvae measure 1.33-1.36 mm (in *C. temminckii*) and 1.63-1.65 mm (in *L. dimidiatus*) in total length. Just before hatching in *C. temminckii*, the oil globule, which is spherical until that time, warps elliptically in lateral view. The elliptical oil globule once again becomes spherical in the larvae at 6 h after hatching. The finding of several oil globules in developing eggs of *L. dimidiatus* and the warping of oil globule before and after hatching in *C. temminckii* are newly known characteristics for the Japanese labrids. In early larval stages of *L. dimidiatus*, numerous pinnule-like appendages appear along the dorsal and ventral margins of the membranous fin. This is possibly a common larval characteristic of the Japanese coline wrasses studied but no marginal appendage is found in early larval stages of the present cheline wrasse *C. temminckii*. Spawning of the labrids was thought to occur in pairing or in groups (Nakazono, 1979; and others) but the spawning of *C. temminckii* took place in harems. That of *L. dimidiatus* also occurred in pairing or in harems in the aquarium and it seems to spawn in harems under natural conditions at least in tropical seas (Robertson and Choat, 1974).

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ACCESSION NUMBER: 1978:244407 BIOSIS Full-text  
DOCUMENT NUMBER: PREV197866056904; BA66:56904  
TITLE: MORPHOLOGICAL STUDY OF THE GENUS ZACCO CYPRINIDAE IN  
RELATION TO THEIR FEEDING BEHAVIORS.  
AUTHOR(S): SUZUKI K [Reprint author]; KIMURA S

CORPORATE SOURCE: FAC FISH, MIE UNIV, TSU, MIE 514, JPN  
 SOURCE: Japanese Journal of Ichthyology, (1978) Vol. 24, No. 4, pp. 251-260.  
 CODEN: GYOZA7. ISSN: 0021-5090.

DOCUMENT TYPE: Article  
 FILE SEGMENT: BA  
 LANGUAGE: JAPANESE

AB The comparative morphology of *Z. platypus* (Temminck et Schlegel) and *Z. temminckii* (Temminck et Schlegel), was examined with particular reference to the relative growth of parts which may be closely related to food capture, the floor of the oral cavity, the gill raker, the pharyngeal bone and the intestine. The significance of the structural adaptations of these organs in the 2 spp. in relation to their feeding behaviors [*Z. platypus* on small algae and *Z. temminckii* on insects], was elucidated.

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ACCESSION NUMBER: 1976:211728 BIOSIS Full-text

DOCUMENT NUMBER: PREV197662041728; BA62:41728

TITLE: BREEDING SYSTEM OF TEMMINCKS STINT CALIDRIS-TEMMINCKII.

AUTHOR(S): HILDEN O

SOURCE: Ornis Fennica, (1975) Vol. 52, No. 4, pp. 117-144.  
 CODEN: ORFEA6. ISSN: 0030-5685.

DOCUMENT TYPE: Article

FILE SEGMENT: BA

LANGUAGE: Unavailable

AB An isolated, color-ringed population was studied for 10 yr on the W coast of Finland. The breeding strategy is a double-clutch system associated with successive bigamy. Every female pairs in rapid succession with 2 males on different territories and lays 1 clutch on each. Every male also pairs successively on the same territory with 2 females and fertilizes 1 clutch of each. The 1st clutch is incubated by the male, the 2nd by the female, and both take sole responsibility of their brood. Exceptions to the normal schedule occur fairly often, chiefly due to the polygynous tendency in males. They court every female that enters their territory, so 2 females occasionally lay their 1st clutches on the same territory. Replacement nests are very rare. Roughly 1/3 of the females shift their breeding grounds from year to year and also lay their clutches in different areas during a single breeding season. Variations of the rapid multi-clutch system were also revealed in 7 other wader species (*Calidris alba*, *Charadrius montanus*, *Tringa macularia*, *Phalaropus lobatus*, *Eudromias morinellus*, *Rostratula benghalensis* and *Jacana americana*); in some it is a regular strategy; in others it is seen occasionally. Evolution of the multi-clutch system from the ancestral monogamous system with its persistent pair bonds and shared parental responsibilities could have proceeded along 2 main lines: either the female lays 1 clutch attended by a male and a 2nd which she incubates herself (as in Temminck's stint), or she lays clutches incubated by more than 1 male (polyandry). The selective advantage of multiple clutches is the potentially increased number of offspring; this is counteracted by the loosening of pair bonds, increased losses of eggs and young because only 1 bird can carry out parental duties, and increased demands on the female by laying more than 1 clutch. The availability of food during the laying period may be the decisive factor: only those species or populations living in very productive habitats with abundant food supplies have been able to evolve the rapid multi-clutch system. High predation rates have intensified selection for production of multiple clutches. The strong pair bond may have prevented the evolution of multi-clutch system in species having potentially good qualifications for this breeding strategy. There is no general adaptation towards reduced clutch size

in species exhibiting rapid multi-clutch systems; they show no clear trend towards prolonged laying intervals between clutches, or delayed sexual maturity. In 4 spp. the eggs are slightly and in 2 greatly reduced in size; in 2 spp. there is no reduction. A characteristic adaptation in Temminck's stint is the delay of the male's incubation for several days, during which he continues to display and is able to fertilize a 2nd clutch.

L18 ANSWER 20 OF 27 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1976:136320 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV197661036320; BA61:36320  
 TITLE: THE RED COLOBUS MONKEY.  
 AUTHOR(S): STRUHSAKER T T  
 SOURCE: (1976) pp. 311. THE RED COLOBUS MONKEY.  
 DOCUMENT TYPE: Book  
 FILE SEGMENT: BA  
 LANGUAGE: Unavailable

L18 ANSWER 21 OF 27 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1974:39356 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV197410039356; BR10:39356  
 TITLE: NOTES ON THE FOOD OF SOME RHODESIAN BIRDS.  
 AUTHOR(S): BORRETT R P  
 SOURCE: Ostrich, (1973) Vol. 44, No. 314, pp. 145-148.  
 CODEN: OSTHAA. ISSN: 0030-6525.  
 DOCUMENT TYPE: Article  
 FILE SEGMENT: BR  
 LANGUAGE: Unavailable

L18 ANSWER 22 OF 27 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1938:4963 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV19381200005783; BA12:5783  
 TITLE: The turtles of Illinois.  
 AUTHOR(S): CAHN, ALVIN R.  
 SOURCE: ILLINOIS BIOL MONogr, (1937) Vol. 16, No. 1/2, pp. 1-218.  
 DOCUMENT TYPE: Article  
 FILE SEGMENT: BA  
 LANGUAGE: Unavailable  
 ENTRY DATE: Entered STN: May 2007  
 Last Updated on STN: May 2007

AB The topography and hydrography of Illinois are descr., and the literature concerning the turtles of the state is reviewed. The classification and nomenclature of Stejneger and Barbour are followed except in the species of Chrysemys and in regard to Pseudemys elegans, which is reduced to synonymy of P. troostii. There follows a key to the families of Illinois turtles, based as far as possible upon external characters, and keys to the Chelydridae, Kinosternidae, Testudinidae, and Trionychidae. For each family a list of synonymy is given, together with a diagnosis based upon (1) external characters and (2) osteological characters. Synonymy is given for each genus, and this is followed by a generic characterization. Under each genus the component spp. are discussed under the topics: synonymy, description, coloration, young, sex differentiation, geogr. distr., Illinois records, habitat, habits, nesting, eggs, food, economic importance, and parasites. A series of photographs illustrates the major characteristics of each species, and locality maps of the state show their distribution in Illinois. 18 spp. are discussed on the basis of Illinois occurrence: *Macrochelys temminckii*, *Chelydra serpentina*, *Sternotherus odoratus*, *Kinosternon flavescens*, K.

subrubrum subrubrum, Clemmys guttata, Emys blandingii, Terrapene c. Carolina, T. ornata, Graptemys geographica, G. p. pseudogeographica, Chrysemys picta marginata, C. p. bellii, C. p. dorsalis, Pseudemys concinna, P. troostii, Amyda mutica, and A. spinifera. 6 spp. are placed in the hypothetical list: Sternotherus carinatus, Chrysemys picta, and Amyda ferox on the basis of probably incorrect identification; C. treleasei as no longer being considered a valid species; Pseudemys hieroglyphica as being doubtful; and Clemmys insculpta because it has been taken so close to the Illinois-Wisconsin line. A bibliography and a glossary are appended. ABSTRACT AUTHORS: A. R. Cahn

L18 ANSWER 23 OF 27 CABA COPYRIGHT 2007 CABI on STN  
 ACCESSION NUMBER: 2000:98478 CABA Full-text  
 DOCUMENT NUMBER: 20001911776  
 TITLE: 4-nonylphenols and 4-tert-octylphenol in water and fish from rivers flowing into Lake Biwa  
 AUTHOR: Tsuda, T.; Takino, A.; Kojima, M.; Harada, H.; Muraki, K.; Tsuji, M.  
 CORPORATE SOURCE: Shiga Prefectural Institute of Public Health and Environmental Science 13-45, Gotenham, Otsu, Shiga 520-0834, Japan.  
 SOURCE: Chemosphere, (2000) Vol. 41, No. 5, pp. 757-762. 16 ref.  
 DOCUMENT TYPE: ISSN: 0045-6535  
 LANGUAGE: Journal  
 ENTRY DATE: English  
 Entered STN: 9 Aug 2000  
 Last Updated on STN: 9 Aug 2000

AB Surveys of 4-nonylphenols (NOs) and 4-tert-octylphenol (OC) were performed for water and fish samples (pale chub (*Zacco platypus*), ayu sweetfish (*Plecoglossus altivelis*), dark chub (*Z. temminckii*), crucian carp (*Carassius carassius*), large mouth bass (*Micropterus salmoides*), and bluegill (*Lepomis macrochirus*)) obtained from eight rivers flowing into Lake Biwa, Japan, once every two months from April 1998 to March 1999. For water samples, NOs were detected all the year round (0.11-3.08 ng/ml) at high frequency (48/48) in the eight rivers. OC was detected at lower concentrations (ND-0.09 ng/ml) and at lower frequency (23/48). The concentrations of NOs in the river water always showed minimum values at 5-8 [deg]C in winter. It was presumed that the formation of NOs by the biotransformation of nonionic surfactants decreased in the sludge treatment of nonionic surfactants at the low temperature (5-8 [deg]C) in winter. Average BCF values of NOs and OC in the six kinds of fish were calculated from the field data. The field BCF values of NOs 15-31 in the six kinds of fish were lower than the laboratory BCF values of 167 in killifish and 282 in salmon. For OC, the field BCF values 129-297 for the three kinds of fish were nearly equal to the laboratory BCF value, 261, in killifish.

L18 ANSWER 24 OF 27 Elsevier BIOBASE COPYRIGHT 2007 Elsevier Science B.V.  
 on STN  
 ACCESSION NUMBER: 2006337412 ESBIOBASE Full-text  
 TITLE: Early development of the shortfin silverside *Chirostoma humboldtianum* (Valenciennes, 1835)  
 (Atheriniformes: Atherinopsidae)  
 AUTHOR: Hernandez-Rubio Ma.C.; Figueroa-Lucero G.; Barriga-Sosa I.d.l.A.; Arredondo-Figueroa J.L.; Castro-Barrera T.  
 CORPORATE SOURCE: Ma.C. Hernandez-Rubio, Laboratorio de Hidrobiologia Experimental, Departamento de Zoologia, Escuela Nacional de Ciencias Biologicas, Prolongacion Carpio

Plan Ayala, C. P., 11340, Mexico.

E-mail: mhernaru@encb.ipn.mx

SOURCE: Aquaculture, (11 DEC 2006), 261/4 (1440-1446), 31 reference(s)

CODEN: AQCLAL ISSN: 0044-8486

PUBLISHER ITEM IDENT.: S0044848606006776

DOCUMENT TYPE: Journal; Article

COUNTRY: Netherlands

LANGUAGE: English

SUMMARY LANGUAGE: English

AB The shortfin silverside *Chirostoma humboldtianum* has been considered for culture in Mexico, but success has been limited by a poor knowledge of its early development. First synthesis of the early development of the shortfin silverside is presented to determine conditions suitable for rearing. Brooder maturation was induced through photothermal cycles. *C. humboldtianum* ova were fertilized in vitro. The eggs were incubated in reconstituted water (160-180 mg/L CaCO<sub>3</sub>) at 18 °C and 5 gm of NaCl per litre. During the hatching day, 300 shortfin silversides were stocked and followed up until metamorphosis in order to establish the timing of exogenous feeding, changes in food type, growth and development during critical periods for survival, according to the theory of saltatory ontogeny. Free embryos hatched 12 days after fertilization at 18 °C. First critical point for survival is the beginning of exogenous feeding. Free embryos started mixed feeding on day four of post-hatching (dph), point of no-return was presented towards the end of mixed feeding on 6 dph, larval period began at six (dph) when the anus is opened, and metamorphosis to juvenile was presented at 65 dph with a SL of 19.34 ± 2.28 mm, when scales and fins were well developed. Differences in growth between periods were detected: free embryos growth slower than larvae but mouth size depicted a larger growth rate in the former. Cephalic length and mouth size were negatively related to standard length in embryos and larvae. Mouth size was positively related to cephalic length in free embryos but negative in larvae. Results suggest that during the free embryo phase, growth priorities are directed to the development of apparatuses and systems; whereas, during the larval period, energy is directed to growth in length, mouth size and development of fins, which allows them to increase their swimming velocity, grants them a greater capacity to obtain exogenous food and, in consequence, increases fitness for survival. .COPYRGT. 2006.

L18 ANSWER 25 OF 27 Elsevier BIOBASE COPYRIGHT 2007 Elsevier Science B.V.  
on STN

ACCESSION NUMBER: 2006073151 ESBIOBASE Full-text

TITLE: The diversity and activity patterns of wild felids in a secondary forest in Peninsular Malaysia

AUTHOR: Azlan J.Mohd.; Sharma D.S.K.

CORPORATE SOURCE: J.Mohd. Azlan, Faculty of Resource Science and Technology, University Sarawak Malaysia, 94300, Kota Samarahan, Sarawak, Malaysia.

E-mail: amazlan@frst.unimas.my

SOURCE: ORYX, (2006), 40/1 (36-41), 32 reference(s)

CODEN: ORYXAM ISSN: 0030-6053 E-ISSN: 1365-3008

PUBLISHER ITEM IDENT.: S0030605306000147

DOCUMENT TYPE: Journal; Article

COUNTRY: United Kingdom

LANGUAGE: English

SUMMARY LANGUAGE: English

AB A study to describe the diversity of wild felids was carried out in Jerangau Forest Reserve, Ulu Terengganu, Malaysia, using camera traps, over a period of 21 months. A total of 24 camera traps were used, with a total of 5,972 trap days. Six species of wild cats in five genera were recorded: tiger

Panthera tigris, leopard Panthera pardus, clouded leopard Neofelis nebulosa, leopard cat Prionailurus bengalensis, golden cat Catopuma temminckii and marbled cat Pardofelis marmorata. This represents all but two of the felid species known to occur in Peninsular Malaysia. The use of camera traps provided detailed information on the occurrence and activity patterns of these relatively secretive mammals. The most frequently photographed species was tiger (38.5% of records) followed by leopard (26.3%) and leopard cat (21.9%). The presence of charismatic flagship species such as tiger in this unprotected lowland dipterocarp secondary forest will be of help to local conservation organizations and the Wildlife Department in any proposals for the protection of these areas. .COPYRGT. 2006 FFI.

L18 ANSWER 26 OF 27 IFIPAT COPYRIGHT 2007 IFI on STN

AN

TITLE:

10798318 IFIPAT;IFIUDB;IFICDB Full-text

SKIN PERPARATION FOR EXTERNAL USE CONTAINING  
PURPURICENUS TEMMINCKII FRASS AS  
THE ACTIVE INGREDIENT; TOPICAL ANTIALLERGENIC  
CREAM CONTAINING ASIAN LONGHORN BEETLE  
WASTES; ANIMAL EXTRACTS

INVENTOR(S) :

Akihisa; Toshihiro, Tokyo, JP  
Ishikawa; Toshinori, Tokyo, JP  
Kishida; Hirotaka, Tokyo, JP  
Mochizuki; Seishiro, Tokyo, JP  
Suzuki; Yoshihiro, Tokyo, JP

PATENT ASSIGNEE(S) :

Unassigned

PATENT ASSIGNEE PROBABLE: Nihon University JP (Probable)

AGENT:

BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS  
CHURCH, VA, 22040-0747, US

	NUMBER	PK	DATE
PATENT INFORMATION:	US 2005037028	A1	20050217
APPLICATION INFORMATION:	US 2003-501504		20030115
	WO 2003-JP287		20030115
			20030115 PCT 371 date
			20030115 PCT 102(e) date

	NUMBER	DATE
PRIORITY APPLN. INFO.:	JP 2002-8022	20020116
	JP 2002-381414	20021227
FAMILY INFORMATION:	US 2005037028	20050217
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Patent Application - First Publication	
	CHEMICAL	
	APPLICATION	
ENTRY DATE:	Entered STN: 18 Feb 2005	
	Last Updated on STN: 11 Jun 2007	

NUMBER OF CLAIMS: 10 9 Figure(s).

DESCRIPTION OF FIGURES:

FIG. 1 is a drawing showing the result of a histamine releaseinhibition test of the water extract of *P. temminckii* frass.

FIG. 2 is a drawing showing the result of a leucotriene secretion-inhibition test of the water extract of *P. temminckii* frass.

FIG. 3 is a drawing showing the distribution of patients by age and by sex.

FIG. 4 is a drawing showing the time until the effect of alleviating itches becomes manifest.

FIG. 5 is a drawing showing the distribution of disease conditions that cause

itches.

FIG. 6 is a drawing showing a fractionation scheme of *P. temminckii* \*\*\*frass\*\*\* extract.

FIG. 7 is a drawing showing the result of the betahexosamimidase release assay with the n-hexane extract of *P. temminckii* frass.

FIG. 8 is a drawing showing the result of the betahexosaminidase release assay with the water extract of *P. temminckii* frass.

FIG. 9 is a drawing showing the result of a Giemsa stain by the 24-well multiwell screening of the water extract of *P. temminckii* \*\*\*frass.\*\*\*

AB It is an object of the present invention to provide antiallergic agents, skin creams, dermatitis-blocking agents, pollinosis-alleviating agents, and bath agents that serve as antipruritics derived from natural products and that prevent, alleviate and treat various itches felt on the skin. The present invention relates to anti-allergic agents, skin creams, dermatitis-blocking agents, pollinosis-alleviating agents, and bath agents comprising *Purpuricenus temminckii* frass as an ingredient.

CLMN 10 9 Figure(s).

FIG. 1 is a drawing showing the result of a histamine release inhibition test of the water extract of *P. temminckii* frass.

FIG. 2 is a drawing showing the result of a leucotriene secretion-inhibition test of the water extract of *P. temminckii* frass.

FIG. 3 is a drawing showing the distribution of patients by age and by sex.

FIG. 4 is a drawing showing the time until the effect of alleviating itches becomes manifest.

FIG. 5 is a drawing showing the distribution of disease conditions that cause itches.

FIG. 6 is a drawing showing a fractionation scheme of *P. temminckii* frass extract.

FIG. 7 is a drawing showing the result of the betahexosamimidase release assay with the n-hexane extract of *P. temminckii* frass

FIG. 8 is a drawing showing the result of the betahexosaminidase release assay with the water extract of *P. temminckii* frass.

FIG. 9 is a drawing showing the result of a Giemsa stain by the 24-well multiwell screening of the water extract of *P. temminckii* frass.

L18 ANSWER 27 OF 27 SCISEARCH COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1999:316435 SCISEARCH Full-text

THE GENUINE ARTICLE: 188RD

TITLE: Ecological factors affecting the feeding behaviour of pangolins (*Manis temminckii*)

AUTHOR: Swart J M (Reprint); Richardson P R K; Ferguson J W H

CORPORATE SOURCE: Univ Pretoria, Dept Zool & Entomol, ZA-0001 Pretoria, South Africa (Reprint)

COUNTRY OF AUTHOR: South Africa

SOURCE: JOURNAL OF ZOOLOGY, (MAR 1999) Vol. 247, Part 3, pp. 281-292.

ISSN: 0952-8369.

PUBLISHER: CAMBRIDGE UNIV PRESS, 40 WEST 20TH ST, NEW YORK, NY 10011-4221 USA.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 39

ENTRY DATE: Entered STN: 1999

Last Updated on STN: 1999

## \*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB

The diet and foraging behaviour of 15 radio-tagged pangolins were studied in the Sabi Sand Wildtuin for 14 months, together with the community composition and occurrence of epigaeic ants and termites. Fifty-five ant and termite species of 25 genera were trapped in pitfalls of which *Pheidole* sp. 2 was the most common (27% occurrence). Five termite and 15 ant species were preyed on by pangolins. Six of these species constituted 97% of the diet while ants formed 96% of the diet. *Anoplolepis custodiens* constituted the major component of the pangolins diet (77% occurrence) while forming only 5% of the trapped ants. Above-ground ant and termite activity was higher during summer than during winter (an 11-fold difference for *A. custodiens*), and the above-ground activity was also higher during the day than at night. Pangolins fed for 16% of their foraging time. However, 99% of the observed feeding bouts (mean duration 40 s) were on subterranean prey. The mean dig depth was 3.8 cm. Prey from deeper digs were fed upon for longer periods. A model taking into account various ant characteristics suggests that ant abundance and ant size are the two most important factors determining the number of feeding bouts that pangolins undertake on a particular ant species. Temperature effects on ant activity and their nest characteristics may exclude pangolins from parts of southern Africa.